DOCUMENT RESUME

ED 176 057 CE 022 088

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TITLE Locus of Control and Class Completion among Adult Basic Education Clients.
INSTITUTION North Texas State Univ., Denton. Coll. of Education.
SPONS AGENCY Texas Education Agency, Austin. Div. of Adult and Continuing Education.
PUB DATE 79
NOTE 13p.

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Academic Achievement; *Adult Basic Education; Adult Students; *Age; *Educational Background; Educational Research; High School Equivalency Programs; *Locus of Control; Minority Groups; Participant Characteristics; *Race; Success Factors
IDENTIFIERS Rotter Internal External Locus of Control Scale; *Texas

ABSTRACT

A project was initiated to (1) determine internal-external orientation of a group of adult basic education-general educational development (ABE-GED) clients; (2) collect demographic data on the clientele; (3) assess functional abilities of clients in math and reading at enrollment and after three months; (4) analyze results of objectives to determine if internally oriented clients demonstrate more achievement and participation; and (5) if internally oriented clients do demonstrate greater participation and achievement, identify and describe a means to change externally oriented clients to internally oriented clients. It was hypothesized that a significantly greater number of internals than externals would complete. The Rotter I-E scale was used to collect data from 511 Texas adult basic education students. Reliability was .62, which indicated the need to use another instrument to measure locus of control. Statistical analysis indicated no relationship between locus of control and completion. Evidence from the study indicates a relation exists between locus of control and age, grade completed before in basic education, and race. A larger protion of blacks (71.4%) rated themselves as externals; Mexican-Americans' ratings almost reflected a chance division. Additionally, 71.4% of those having a sixth grade or less education categorized their perceived locus of control as external. (CSS)

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ED176057

LOCUS OF CONTROL AND CLASS COMPLETION AMONG ADULT BASIC EDUCATION CLIENTS

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July 1978-June 1979

CE 022 088

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Locus of Control and Class Completion Among Adult Basic Education Clients

Since the enactment of federal legislation to provide adult basic education many adults have benefited from these services. Teachers and administrators throughout the country can identify individuals in each service area whose lives have been changed because of educational opportunities provided by adult basic education (ABE). However, since 1964 the high dropout rate has tended to overshadow the success of ABE. William P. Kent (1973) in a longitudinal evaluation of ABE found the dropout rate slightly higher than 60% during a six month period in 1971-1972. Thus, ABE personnel are struggling with the question—"Why do so many clients withdraw before earning the equivalency diploma, attaining an eighth grade functional level, or attaining a personal goal?"

Riessman (1972) has suggested that the lack of effectiveness in educating the undereducated adult is because of teaching strategies in the classroom and deficiencies in teacher training. Anderson and Niemi (1970) analyzed 3000 studies and reports on the disadvantaged adult and concluded: "As yet, attempts (including education efforts) to ameliorate the situation of the disadvantaged have been noticeably piecemeal and unsuccessful (p. 58)." "There is some indication, however, that education may offer a solution to the problem (p. 58)." "Educational programs can be directed toward altering the situation of the disadvantaged adult but to do so, a different conception of educational programming must be effected and the barriers which inhibit the participation of the disadvantaged must be overcome (p. 58)." What are these barriers? Anderson and Niemi identify several most of which are currently being addressed by ABE personnel. However, they identify one barrier, the mental or psychological state of the disadvantaged, which is not being dealt with in a concerted effort in programs. They describe the situation:

> As victims of a situation in which they recognize themselves to be outnumbered and without power, the disadvantaged have withdrawn from society and established their own sub-cultural system. This reinforces the isolation of the disadvantaged and promotes the development of a value system that is at variance with the superordinate values. The resultant alienation and powerlessness of the sub-cultural group promotes listlessness and futility so that the group is characterized by a low level of aspiration and a lack of motivation. In their sub-cultural environment the disadvantaged see no future that differs significantly from the present; consequently, they are interested only in those pragmatic concerns related to survival at the subsistence level. (p. 60)

In the above quote Anderson and Niemi identify alienation and powerlessness as part of the explanation for limited involvement by the disadvantaged and, possibly, one reason for a high dropout rate. They repeat this theme earlier when they note: "In terms of their own self-perception, the disadvantaged have no conviction that it is within their power to alter their own circumstances (p. 31)." In a review of manpower programs for the disadvantaged Tiffany, Cowan, and Tiffany (1970) argue that manpower programs have been ineffective for the majority of the disadvantaged because these programs have been treating the effects of a lack of education and training and ignoring the psychological orientation of the disadvantaged toward having the power to influence their situation or lacking the power to improve their condition. Powerlessness is defined as the expectancy by the individual that his behavior has no affect on the outcome of a situation.

Julian Rotter (1954) has explained this concept in terms of locus of control which consists of either an internal or an external orientation. If a person believes that he can change his current situation by his behavioral acts, he is described as internally oriented. If a person believes that his behavioral acts cannot change or affect his current situation, or that the environment controls his situation, he is described as externally oriented.

OBJECTIVES OF THE STUDY

The objectives of this project were:

1. To determine internal-external orientation of a group of ABE-GED clients.
2. To collect demographic data of the clientele involved.
3. To assess functional abilities of clients in math and reading at enrollment and at the end of three months.
4. To analyze the results of objective 1, 2, and 3 to determine if internally oriented clients demonstrate more achievement and continued participation.
5. If internally oriented clients do demonstrate greater participation and achievement, then to identify and to describe a means to change externally oriented clients to internally oriented clients.

It was hypothesized that a significantly greater number of internals than externals would complete as defined in this project. Objectives two through five related to this hypothesis. Collection of demographic information allowed for comparison of these factors with the locus of control. Objective three served to provide opportunities to relate functional levels to I-E scores. However, the project staff could not collect consistent data on functional levels and this ob-

jective had to be omitted in the analysis of the data. The original plan specified the use of a selected standarized test for each class involved in the study. However, operational procedures prevented requiring the use of a single instrument. Consequently, functional levels were collected from each teachers' records and were based on several different standardized tests and by informal assessments. This prevented valid comparison of functional levels with locus of control scores.

DEFINITIONS

Rotter (1966) has defined locus of control (internal-external orientation) as existing:

> When a reinforcement is perceived by the subject as following some action of his own but not being entirely contingent upon his action, then in our culture it is typically perceived as the result of luck, chance, fate as under the control of powerfuls, or as unpredictable because of the great complexity of the forces surrounding him. When the event is interpreted in this way by an individual, we have labeled this a belief in external control. If the person perceives that the event is contingent upon his own behavior or his own relatively permanent characteristics, we have termed this a belief in internal control. (p. 1)

For the purposes of this study subjects were grouped into two categories based on exit from the ABE program. Completions were defined as those who either remained in attendance throughout the time that data was collected (August 1978 through December 1978), acieved their personal academic goal such as an eighth grade functional level, or were recommended by their instructors to take the GED test. Incompletions or drops were those who left the ABE program without achieving any of these goals.

METHODS

Subjects

A total of 553 adults enrolled in basic education classes in Texas comprised the population. Five adult education cooperatives in Texas participated: Dallas, Fort Worth, Houston, Valley View, and Wichita Falls. Local program administrators selected classes to participate. Subjects attended ABE, GED classes and learning centers and included both ABE and GED clients. No English-as-a-Second-Language classes were included.

Local Program	Projected Participants	Rotter Scales Administered	Total Data Completed
1	100	62	61
2	300-400	63	52
3	200-300	67	56
4	200-300	240	236
5	150	121	106

Figure 1. Number of participants from each local program.

Procedure

A project research assistant met with each local director and local staff in July and August 1978 to determine final procedures for collecting data. The research assistant conducted training sessions with teachers on procedures for administering the Rotter I-E Scale and for collecting demographic data.

Data collection began as programs initiated fall classes in August and September 1978. The Rotter Scale was administered during the first two weeks of classes. A cassette tape of the scale was available to teachers for use with subjects having reading difficulties. Once these I-E Scales were completed the research assistant collected and scored them.

The Rotter I-E Scale consists of a 29 item forced-choice scale. The test is scored for externality. As recommended by Rotter the mean score for this population (9.698) was used as a point of division for internals and externals. Those subjects scoring eight or less were identified as internals while those scoring 10 or greater were identified as externals. Subjects who scored nine were not included in either category.

During the period September 1978 to December 1978 the research assistant visited classes and local programs to solve problems, to answer questions, and to collect data. After entering the data on computer forms, the assistant isolated missing or inaccurate data and corrected these errors when possible by consulting class teachers.

This project began in July 1978 and ended in June 1979.

RESULTS

Reliability of the Rotter I-E Scale

The reliability for the Rotter I-E Scale when used with adults as reported in the literature ranges from .60 to .80. When used with adult inmates Peters (1968) reported reliability coefficients which ranged from .64 to the low 70's, and Moore (1972) reported reliability coefficients of .571 (pretest) and .61 (posttest) for adults enrolled in adult basic education classes.

The reliability of the Rotter I-E Scale for this sample was estimated by use of the Pearson Correlation Coefficient with a sample of 231 adults. This resulted in a reliability score of .62 when corrected by the Spearman-Brown formula.

Statistical Analysis of the Data

The chi square test was used to determine if any differences existed between the locus of control and these categories: race, age, sex, employment, grade level completed in public school before enrolling in basic education, and completion.

Results indicated that a significant relationship for this population does not exist between locus of control and each of these categories: completion, employment and sex. However, a significant relationship does exists between locus of control and each of these categories: race, grade completed before enrolling, and age.

The results indicate that internality tended to increase with age; externality is greatest among those who have completed six or less grades in school; and a disproportionate number of Blacks are external. The relationship between I-E and completion or dropout was not significant for this population. For locus of control and completion the chi square value was 2.31246 with 1df and was significant at .1283. Thus although the results approached a significant relation, they were not significant at an acceptable level.

Table 1

Chi Square Values of Locus of Control by Categories

Category	df	X^2	
Age	4	12.29868	*
Completion	1	2.31246	
Employment	2	2.04929	
Grade	2	7.11122	*
Race	5	14.35784	*
Sex	1	.01424	

* (Significant at .05 or less.)

A chi square test was used to examine the the relation between completion and those categories discussed above. Results indicate a significant relation between completion and race and between completion and age.

Table 2

Chi Square Values for Completion by Categories

Category	df	X^2	
Age	4	23.33032	*
Employment	2	5.66378	
Grade	2	2.33053	
Race	5	12.81468	*
Sex	1	2.14077	

* (Significant at .05 or less.)

Application of the chi square test to the external population to examine the frequencies of completion and dropout within the five categories above resulted in no significant relationships. Using the same procedure with internals resulted in significant relationships with age and grade completed.

Table 3

Chi Square Values for Internals by Categories

Category	df	X^2	
Age	4	14.20062	*
Employment	1	.98323	
Grade	2	7.41612	*
Race	2	1.01849	
Sex	1	1.56411	

* (Significant at .05 or less.)

A Brief Summary of Selected Data Frequencies by Categories

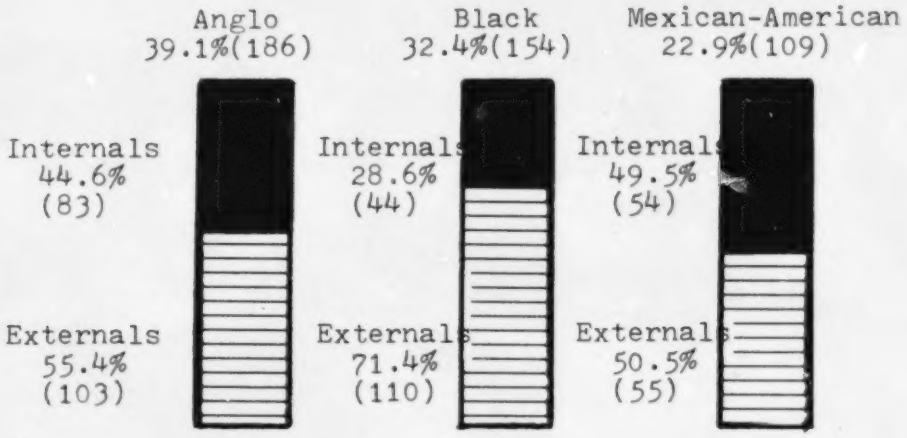

Figure 2. I-E and ethnic groups.

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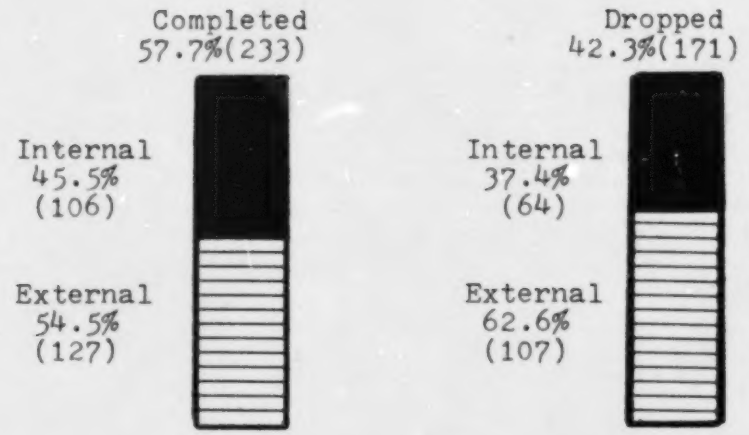

Figure 3. Completions and dropouts by I-E frequencies.

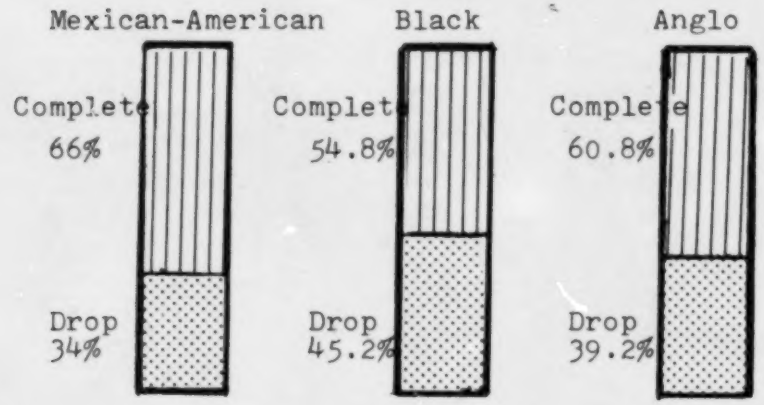

Figure 4. Frequencies of completion by ethnic group for internal subjects.

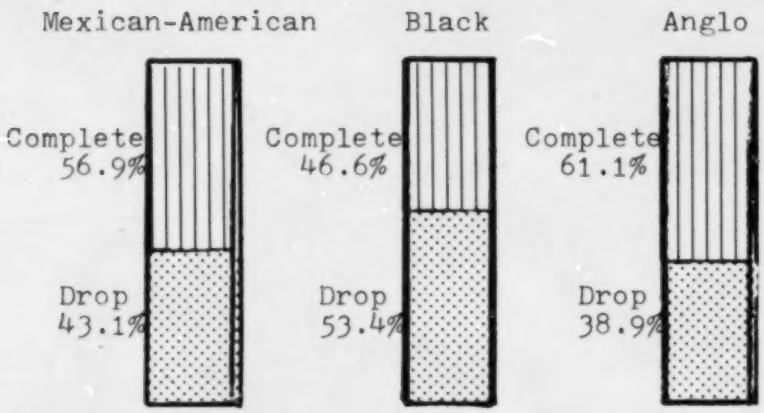

Figure 5. Frequencies of completion by ethnic group for external subjects.

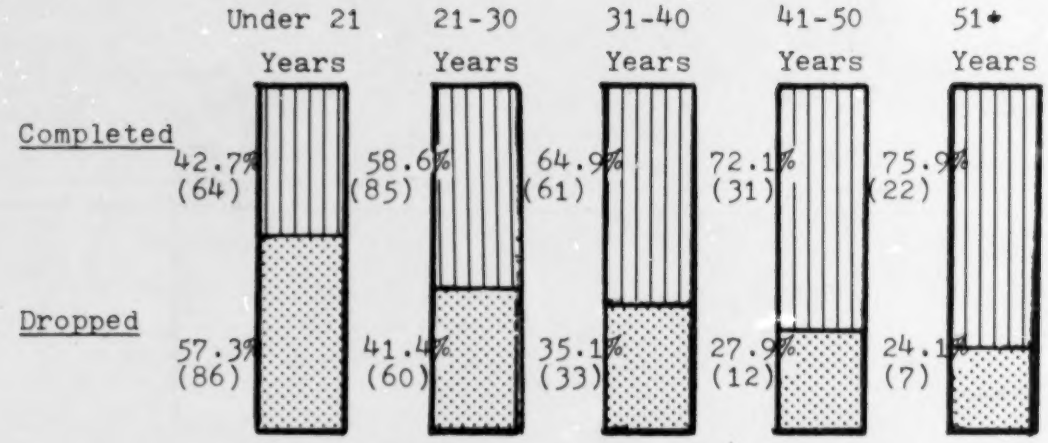

Figure 6. Frequencies of completion by age category.

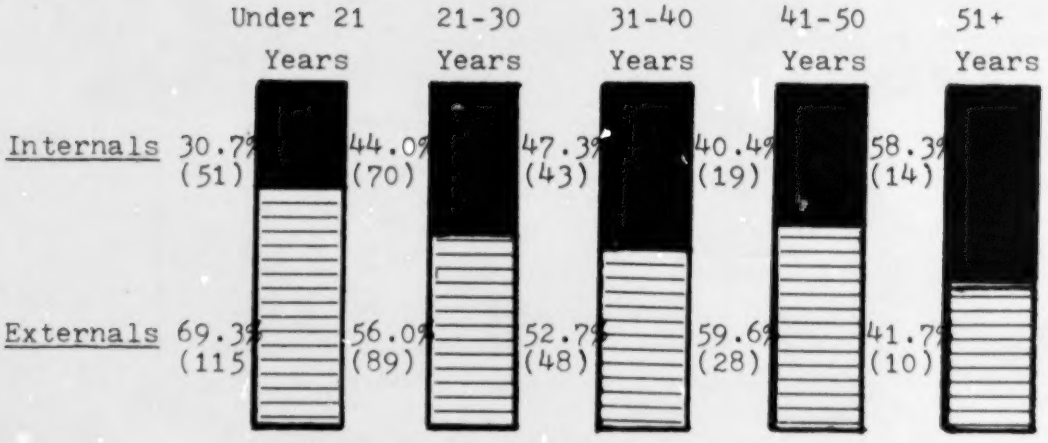

Figure 7. Locus of control by age groups.

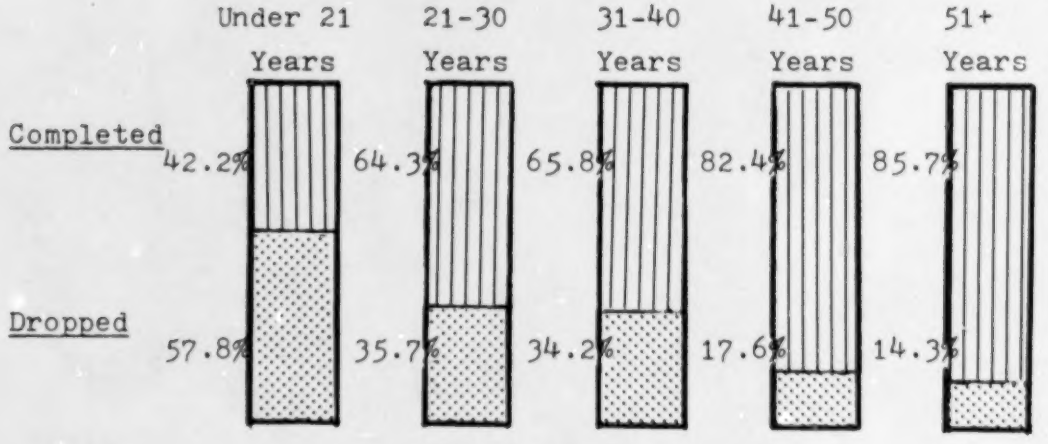

Figure 8. Completion frequencies by age groups for internals.

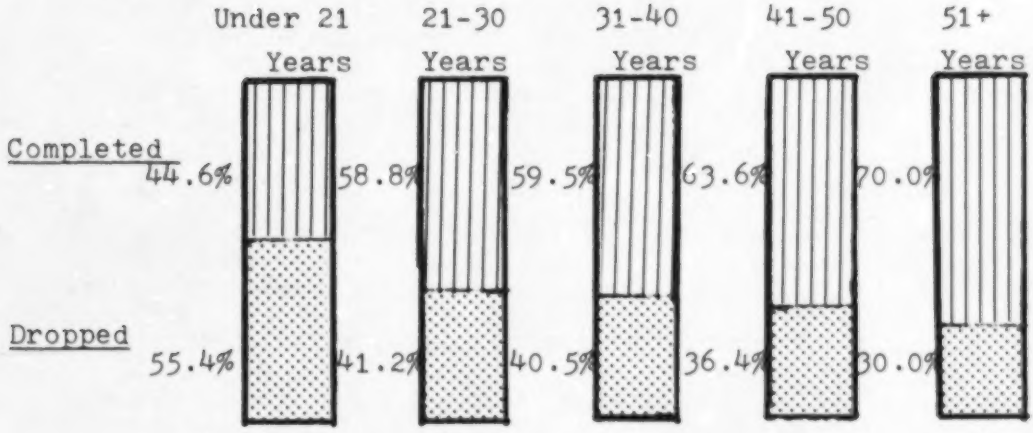

Figure 9. Completion frequencies by age groups for externals.

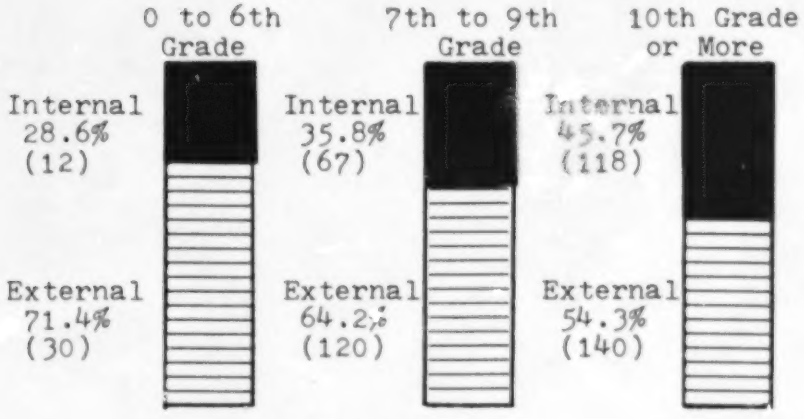

Figure 10. Locus of control by grade level completed as reported at enrollment in a class.

DISCUSSION

The reliability score of the Rotter I-E Scale for this population was .62. This score is comparable to the reliability scores obtained by Peters (1968) and by Moore (1972) with similar populations. This reliability score along with scores of the two studies identified indicate the need to use another instrument to measure locus of control or to develop one that would provide a greater reliability score.

The intent of this study was to determine if a relationship existed between locus of control and completion in an adult basic education program. If completion or dropouts were significantly affected by locus of control, this would suggest a cause-effect relation and would imply strategies to reduce dropouts and thereby increase retention rate.

Statistical analysis of the data indicated no relationship between locus of control and completion. As indicated in the results section the calculated level of significance for the relation of locus of control to completion was .1283.

One weakness in the study was the inability to follow-up actual reasons for dropouts. Those subjects who dropped for reasonable causes, such as moving from the service area, illness, employment, childcare problems could not be distinguished from those who dropped because of personal reasons which did not prevent their continued participation. A clearer distinction between these two groups might affect the locus of control-completion relationship. Obviously, ability to determine why clients leave looms as a major limitation to the improvement of ABE programs. Although this kind of information appears in state and federal reports, some question the reliability of reasons given for client separations.

Evidence from the study indicates that a relation exists between locus of control and age, grade completed before enrolling in basic education, and race. A larger portion of Blacks (71.4%) rated themselves as externals (See Figure 3.). Among Mexican-Americans the portion of internals and externals almost reflected a chance division (See Figure 3.). Clearly ethnic differences exist relative to perceived locus of control.

Additionally, 71.4% of those having a sixth grade or less education categorized their preceived locus of control as external (See Figure 10.). Figure 10 indicates that as educational level increases internality increases. For those clients 16 to 20 years old, 69.3% characterized their position as external. This represents a larger percentage than any other age category (See Figure 9.). Obviously, a majority of those clients under 21 years old, with less than a sixth grade education, and Blacks perceived that their environment controls them more than they exercise control over their environment.

When testing the five categories with completion/dropout, age and race measure as significant. Sixty percent of Mexican-Americans and 62.4% of the Anglos completed while 45.4% of Blacks completed. When ethnic groups were examined by internal and external groupings and the frequencies completing and dropping out in each ethnic group, the results revealed a greater percent of internal Mexican-American and Black subjects completed than did externals of the same ethnic groups (See Figures 4 and 5.). However, among Anglos there were only very small differences between internals who completed and externals who completed (See Figure 4 and 5.). Actually in this instance the underlying locus of control theory was not supported in the .3% more externals completed than internals.

Age provided several interesting factors from the view of completion. Completion among the five age groups increased as age increased (See Figure 6.). The frequency of internals also increased with each group except for the category 41-50 years. When age was examined with completion, the results again showed that for both internals and externals completion frequencies increased as age increased (See Figures 8 and 9.).

Figure 10 shows that frequencies for externals in each grade category decreased as grade completed increased. For example, 71.4% of the externals had completed six or less grades; 64.2% had completed seven to nine grades, and 54.3% had completed ten or more grades.

Statistical analysis provided only limited support for the research questions and provided no significant relationship between completions and locus of control. However, frequency distributions, although not definitive, still raise several questions that need further examination. One of these questions would be: "Why do differences exist among ethnic groups?"; "Why do completion and internality increase as age and grade completed increase?"

This study does suggest that in terms of improving retention rate in ABE classes a critical group who need additional attention in terms of programming and instruction are those who are 21 years old or younger; who have completed six or less grades in school; and those clients who are Black.

Clearly, additional study and examination of this data should be conducted. Ideally there should be some investigation into the demographic, psychological, and social characteristics of internals and externals who dropped out. The same should be done for internals who completed and externals who completed and for internals completing compared to internals who dropped out. Ethnic groups require additional study to determine differences among Mexican-Americans, Blacks, and Anglos and completion rates. For example, why do more Blacks drop out and rate themselves as externals.

Before continued use with this population the rotter I-E Scale needs revision to increase test reliability or another scale such as the Nowicki Adult I-E Scale should be used to determine its reliability with this population.

A Brief Review of Change Strategies to Reduce Externality and Enhance Internality

Results of this study do not definitively link locus of control and completion in ABE. However, should one have reason to seek such a change several methods currently exist. These methods may be categorized into three areas: a work approach, a counseling approach, and an instructional approach.

The first method lends itself to vocational training and, therefore, may not be appropriate for adult basic education. Ehrle (1969) recommends that many youth can best be reached through a work approach which is the most commonly available and socially approved means of mastering one's environment. Similarly Dua (1970) concluded that action-program procedures were more effective than reeducation programs in inducing attitudinal changes.

The second method involves counseling clients. In group counseling sessions, the clients talk about themselves and their problems. With each confrontation the counselor attempts to replace any external control statement with an internal one (Reimanis, 1974). Under individual counseling situations, the same method was employed. These methods produced significant increases in internal control. Mink supports this technique as applicable to nontraditional students in community colleges (Christner and others, 1975). Although these are counseling techniques, teachers in ABE classes could be trained to use such methods within their classes.

A similar method was reported by Pierce (1970). In this counseling setting, the concept I-E was discussed openly with the client and then the counselor pointed out internal versus external responses to the client continuously. The underlying theory is that if an external can be taught more productive behavior of internality, then that individual may be able to use this new behavior.

The last recommended strategy may be the most applicable to adult education programs. A systematic approach to instruction is based on mastery learning as defined by Bloom (Baker, 1972). Baker states that a student begins to move toward internality when he overcomes obstacles, builds a pattern of success, and receives rewards in a controlled manner. This systematic approach involves three essential elements: (1) the rationale for learning is defined, (2) the objectives are determined, and (3) diagnosis which appropriately places the student. (It should be remembered that the student is involved in this.) (One wonders to what extent are ABE teachers currently able to involve clients in this process.) By including students in the planning of educational programs, the teacher helps build concepts of control into their lives.

Allowing students to have direct influence on their own learning experiences may be the first step toward developing internality. The entire concept of using students as peer tutors or developing contracts for individual learning projects has been considered in adult basic education only on a limited basis. (Interestingly enough the ABE client is allowed little or no input into developing his educational plan; he is controlled by the ABE environment.) Encouraging these students to experience influence in their own or in another's educational activities may allow opportunities for developing internality as well.

REFERENCES

Anderson, Darrell and John Niemi. *Adult education and the disadvantaged adult*. Syracuse: Syracuse University, 1970.

Baker, George A. Toward internal locus of control in the community college student. *Educational Technology*, October 1972, *12*, 73-76.

Christner, Catherine, & Mink, Oscar, & Washburn, Barbara. *Locus of control and success expectancy*. Austin, TX: College Associates, 1975.

Dua, P.S. Comparison of the effects of behaviorally oriented action and psychotherapy reeducation on introversion-extraversion, emotionality, and internal-external control. *Journal of Counseling Psychology*, 1970, *17*, 567-572.

Ehrle, Raymond A. An alternative to "words" in the behavior modification of disadvantaged youth. *Vocational Guidance Quarterly*, 1968, *17*, 41-46.

Kent, William. *Executive summary of a longitudinal evaluation of adult basic education program*. November 1973 (ERIC Document Reproduction Service No. ED 085 418).

Moore, Allen. Selected standardized noncognitive measures and their utility for the disadvantaged. *Adult Education*, 1972, 110-121.

Peters, J.M. *Effect of internal-external control on learning and participation in occupational education*. Raleigh, NC: Center for Occupational Education, 1968.

Pierce, Richard and others. Teaching internalization behavior to clients. *Psychotherapy: Theory, Research, and Practice*, 1970, 217-220.

Reimanis, Gunars. Effects of locus of reinforcement control modification procedures in early graders and college students. *The Journal of Educational Research*, 1974, *68*, 124-127.

Riessman, Frank. Unmet needs in educating the undereducated adult. *Journal of Extension*, Fall 1972, 13ff.

Rotter, Julian. *Social learning and clinical psychology*. Englewood Cliffs: Prentice-Hall, 1954.

Rotter, Julian. Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs*, 1966, *80*, (1, Whole No. 609).

Tiffany, Donald, & Cowan, James, & Tiffany, Phyllis. *The Unemployed: A Social-Psychological Portrait*. Englewood Cliffs: Prentice-Hall, 1970.

APPENDIX A

References to locus of control change strategies,
to I-E Scales and to I-E theory

References to Locus of Control Change Strategies and to I-E Scales

Change Strategies

Baker, George A. Toward internal locus of control in the community college student. *Educational Technology*, October 1972, *12*, 73-76.

Bradley, Robert H. and others. Domain specific aspects of locus of control: Implications for modifying locus of control orientation. *Journal of School Psychology*, 1977, *15*, 18-24.

Chandler, Theodore A. Locus of control: A proposal for change. *Psychology in the Schools*, 1975, *12*, 334-339.

Christner, Catherine A., & Mink, Oscar, & Washburn, Barbara. *Locus of control and success expectancy*. Austin, TX: College Associates, 1975.

Dua, P.S. Comparison of the effects of behaviorally oriented action and psychotherapy reeducation on introversion-extraversion, emotionality, and internal-external control. *Journal of Counseling Psychology*, 1970, *17*, 567-572.

Ehrle, Raymond A. An alternative to "words" in the behavior modification of disadvantaged youth. *Vocational Guidance Quarterly*, 1968, *17*, 41-46.

Pierce, Richard M. and others. Teaching internalization behavior to clients. *Psychotherapy: Theory, Research, and Practice*, 1970, *7*, 217-220.

Reimanis, Gunars. Effects of locus of reinforcement control modification procedures in early graders and college students. *The Journal of Educational Research*, September 1974, *68*, 124-127.

I-E Scales

Duke, Marshall P. and Nowicki, Stephen. Personality correlates of the Nowicki-Strickland locus of control scale for adults. *Psychological Reports*, 1973, *33*, 267-270.

Gatz, Margaret and Good, Paul R. An analysis of the effects of the forced-choice format of Rotter's internal-external scale. *Journal of Clinical Psychology*, April 1978, *34*, 381-385.

Robinson, John P. and Shaver, Phillip R. *Measures of social psychological attitudes*. Survey Research Center, Institute for Social Research, 1973.

Locus of Control Theory

Joe, Victor Clark. Review of the internal-external control of construct as a personality variable. *Psychological Reports*, 1971, *28*, 619-640.

Lombardo, John and others. The relationship of internality-externality, self-acceptance, and self-ideal discrepancies. *The Journal of Genetic Psychology*, 1975, 281-288.

Lefcourt, Herbert. Belief in personal control: Research and implications. *Journal of Individual Psychology*, 1966, *22*, 185-195.

Lefcourt, Herbert. Internal versus external control of reinforcement. *Psychological Bulletin*, 1966, *65*, 206-220.

Phares, E. Jerry. Expectancy changes in skill and chance situations. *Journal of Abnormal and Social Psychology*, 1957, *54*, 339-342.

Rotter, Julian. Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs, 80*, (1 Whole No. 609).

Rotter, Julian. Some problems and misconceptions related to the construct of internal versus external control of reinforcement. *Journal of Consulting and Clinical Psychology*, 1975, 43, 56-67.